



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,952	09/11/2003	Kenneth L. Addy	H0004587 (16128)	5855
128 7590 03/22/2007 HONEYWELL INTERNATIONAL INC. 101 COLUMBIA ROAD P O BOX 2245 MORRISTOWN, NJ 07962-2245			EXAMINER	
			SHEDRICK, CHARLES TERRELL	
			ART UNIT	PAPER NUMBER
			2617	
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	03/22/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/659,952	ADDY ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Charles Shedrick	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 26 December 2006.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 21,23-26,28 and 30-32 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 21,23-26,28 and 30-32 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 11 September 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed 12/26/06 have been fully considered but they are not persuasive.

*Regarding Applicant's arguments that the transmitting, by the transmitter, first periodic sync signals over short durations and with a periodicity such that a total of all of the first periodic sync signals over a period of one hour are equal to or less than a total of 2 second on-air time per hour is a novel feature over prior art, the Examiner respectfully disagree. Based on the Applicants arguments the Examiners respectfully notes that at this time the distinction is not clear as to why it would not have been obvious in light of the prior art and the FCC regulations for a person of ordinary skill to make the desired modifications. The added limitation to the claim is well known based on the Applicants admission in paragraph 0008 of the specification and FCC rule 15. The Examiner respectfully submits that it would have been obvious to a person of ordinary skill in the art to make the modifications for the purpose of complying with rule 15 of the FCC regulations.*

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Art Unit: 2617

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 21-22,24-26, and 28-32** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Pildner et al. (US Patent 5,625,338)** in view of **Haugli et al. (US Patent # 5,991,279)** and further in view of **Hayes et al. US Patent Pub. No.: 2002/0140571**, hereinafter, "Hayes" and further in view of **FCC regulations part 15**.

Consider **claim 21 and 28**, Pildner et al. teach a security alarm system (i.e., see figure 1) comprising: at least one battery 90 (i.e., see **figure 1 and col. 6 lines 29-30**) powered wireless keypad 16 (i.e., see **figure 1 and col.3 lines 1-25**) comprising a Radio Frequency (RF) receiver 20 (i.e., see **figure 1 and col.3 lines 1-25**) and a reduced display module 23 (i.e., see **figure 1 and col.3 lines 1-25**); and an AC powered control panel (i.e., see **figure 1 and col.3 lines 1-25**) comprising an RF transmitter 8 (i.e., see **figure 1 and col.3 lines 1-25**) comprising a means for transmitting(i.e., see **figure 1 and col.3 lines 1-25**).

However, Pildner et al. does not specifically disclose transmitting a first periodic sync signals which are received and used by the RF receiver to maintain proper synchronization of the receiver with the RF transmitter during second periodic wake up windows for possible transmissions of data, and means for transmitting data during at least some of the second periodic wake up windows for the transmission of data; wherein the receiver wakes periodically to receive first periodic sync signals which are used by the receiver to maintain the receiver properly synchronized with the transmitter during the second periodic wake up windows for possible transmissions of data from the transmitter; and wherein the receiver wakes periodically for a short duration at the start of each second periodic wake up window to receive a possible transmission of data, and if no transmission is received goes back to sleep, and if a transmission is received stays awake to receive the full transmission of data, such that the average current consumed by the battery powered receiver to wake periodically to receive the first periodic sync signals to maintain synchronization and to wake periodically to listen for the possible second periodic transmissions of data is less than the average current required to maintain the receiver awake continuously.

However, in the same field of endeavor Haughli et al. teaches a synchronizing method between a Radio frequency (RF) transmitter and a battery powered RF receiver wherein: the transmitter (FIG. 3, transmitter blocks connected to antenna 80), transmits first periodic sync signals which are received and used by the receiver to maintain proper synchronization of the receiver with the transmitter during second periodic wake up windows for possible transmissions of data (**column 2, lines 15-18, column 22, lines 60-63, and column 16, lines 56-60**); the transmitter transmits data during at least some of the second periodic wake up windows for the

Art Unit: 2617

transmission of data (**column 16, lines 45-47, and abstract**); the receiver wakes periodically to receive the first periodic sync signals which are used by the receiver to maintain the receiver properly synchronized with the transmitter during the second periodic wake up windows for possible transmissions of data from the transmitter (**column 16, lines 45-61**); and wherein the receiver wakes periodically for a short duration at the start of each second periodic wake up window to receive a possible transmission of data (**column 16, lines 45-47**), and if no transmission is received goes back to sleep, and if a transmission is received stays awake to receive the full transmission of data (**column 17, lines 38-47 - inherently if no transmission is addressed to the terminal, it goes back to sleep**), such that the average current consumed by the battery powered receiver to wake periodically to receive the first periodic sync signals to maintain synchronization and to wake periodically to listen for the possible second periodic transmissions of data is less than the average current required to maintain the receiver awake continuously (**column 1, line 56-column 2, line12 - inherently the average current consumed by the battery powered receiver to wake periodically to receive the first periodic sync signals to maintain synchronization and to wake periodically to listen for the possible second periodic transmissions of data is less than the average current required to maintain the receiver awake continuously**).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Pildner et al. to include the teachings of Haugli et al. for the purpose of power conservation and synchronization.

However, Pildner in view of Haugli does not specifically teach the reduced display module providing an accurate display of the present status of the security alarm system.

In the same field of endeavor, Hayes teaches reduced display module providing an accurate display of the present status of the security alarm system (i.e., see at least paragraphs 0006, 0174, and also paragraphs 0135 and 0154).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Pildner et al. as modified by the Haugli et al. to include reduced display module providing an accurate display of the present status of the security alarm system for the purpose of an efficient display as taught by Hayes.

**Consider claim 25 and 31 as applied to claims 21 and 28 respectively,** Pildner et al. clearly disclose the claimed invention except wherein the receiver further comprises a primary battery cell of less than 2 amp-hour capacity which operates for more than 3 years before the battery is discharged.

However, Haugli et al. as modified by Hayes clearly show and disclose wherein the receiver further comprises a primary battery cell of less than 2 amp-hour capacity which operates for more than 3 years before the battery is discharged (**column 5 lines 13-25**).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Pildner et al. to include the teachings of Haugli et al. for the purpose of power conservation and efficiency.

**Consider claims 26 and 32 as applied to claims 21 and 28 respectively,** Pildner et al. as modified by Haugli et al. and further modified by Hayes clearly show and disclose wherein the transmitter transmits periodic RF messages comprising the present status of the security alarm system to the reduced display module to provide a display of the current status of the security alarm system (**col. 5 lines 10-20**).

**Claims 23 and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Pildner et al.** (US Patent 5,625,338) in view of Haugli et al. (US Patent # 5,991,279) and further in view of **Hayes et al.** US Patent Pub. No.: 2002/0140571, hereinafter, “**Hayes**” and further in view of **Gibbons et al.** (US Pub. No.: 2001/0053710 A1)

Consider **claims 23 and 30 and as applied to claims 21 and 28 respectively**, Pildner et al. as modified by Haugli et al. and further modified by Hayes clearly disclose the claimed invention except wherein the means for transmitting during the second periodic wake up windows transmits with a periodicity of 3 seconds, such that the average response time of the battery powered receiver to changes reflected by the transmissions of data is less than 1.5 seconds on average and no greater than 3 seconds in the worst case.

However, Gibbons teaches such limitations in **column 6, paragraph (0065)** (in combination, it is inherently understood that transmission of data is no greater than 3 seconds).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature of the periodicity of the second periodic wake up windows is 3 seconds, such that the average response time of the battery powered receiver to changes reflected by the transmissions of data is less than 1.5 seconds on average and no greater than 3 seconds in the worst case, as taught by Gibbons, in view of Pildner et al. as modified by Haugli et al. and further modified by Hayes, in order to provide a reduced power operating mode for a wireless communication system.

**Claim 24** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Pildner et al.** (US Patent 5,625,338) in view of Haugli et al. (US Patent # 5,991,279) and further in view of **Hayes**

Art Unit: 2617

**et al. US Patent Pub. No.: 2002/0140571, hereinafter, "Hayes" and further in view of Schreder et al. (US Patent No.: 5,107,488).**

**Consider claim 24 and as applied to claim 21 above,** Pildner et al. as modified by Haugli et al. and further modified by Hayes clearly disclose the claimed invention except for specifically disclosing wherein the transmitter and receiver each further comprise clocks, the clocks in the transmitter and receiver having no more than a 2millisecond time shift relative to each other.

However, in the same field of endeavor, Schreder et al. disclose wherein the transmitter and receiver each further comprise clocks (i.e., see figure 1 ETR and STR), the clocks in the transmitter and receiver having no more than a 2millisecond time shift relative to each other (i.e., the time shifts can be artificially produced to coincide)(**col. 2 lines 12 –18**).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Pildner et al. as modified by Haugli and further modified by Hayes to include the transmitter and receiver each further comprise clocks, the clocks in the transmitter and receiver having a minimal time shift relative to each other for the purpose of synchronization and signal timing.

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Shedrick whose telephone number is (571)-272-8621. The examiner can normally be reached on Monday thru Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kincaid Lester can be reached on (571)-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Charles Shedrick



LESTER G. KINCAID  
SUPERVISORY PRACTICER

AU 2617  
March 13, 2007